Systematic adaptive management can change EA

Addressing uncertainty and connecting the dots between EA, Permitting, Operations

Brett Wheler
Sr. Environmental Assessment Policy Advisor
“Uncertainty is an uncomfortable position. But certainty is an absurd one.”

Voltaire
Conclusion: Systematic Adaptive Management Framework

• Acknowledges inherent uncertainty in impact prediction & sets framework within which project can operate
• Path forward to project approval in spite of uncertainty
Mackenzie Valley Review Board

- Court-like tribunal in NWT
  - Co-management (50% aboriginal)
- EAs for large or controversial projects
- Makes determinations about **significant adverse impacts** on the “environment”
  - Can impose mitigation measures or reject projects
The Jay Project is the cornerstone of Ekati Diamond Mine’s future. Please join Dominion Diamond Ekati Corporation for a public meeting to discuss our mine-life extension plans and to answer any questions community members may have.

Public Meeting
Date: Thursday, June 30, 2016
Time: 5:00pm
Location: Behchoko Cultural Centre
The Significance Spectrum

The Significance Spectrum

Zero Impact

Significance Threshold

Catastrophic Impact

Predictions vs Reality
Aquatic Response Frameworks*

- Ekati, DeBeers Snap Lake, & Diavik diamond mines
- Include significance thresholds for changes to aquatic environment, e.g.
- System of low, med, high action levels beneath ST that trigger increasingly drastic management actions

* https://wlwb.ca/content/guidelines-adaptive-management-%E2%80%93-response-framework-aquatic-effects-monitoring
EA for Mine Expansion: Adaptive Management on the Record

- Many proponent commitments to adaptive management
- Many recommendations from parties
- Experience with response frameworks helped bring clarity to discussion
On the Record: Two types

1. Systematic adaptive management framework with action levels, etc.
2. Improve mitigation
   – This is the generic, fuzzy version (use monitoring results to do better)
Report of Environmental Assessment
And Reasons for Decision

Dominion Diamond Ekati Corp.
Jay Project
EA1314-01

February 1, 2016
Integrated into Approval

- Only 1\textsuperscript{st} type reliably contributes measures
Adaptive Management - Integral to Approval

• Adaptive management was fully integrated into Report of EA
  – Phrase used 81 times, throughout Report
  – Incorporated into every mitigation measure
  – Developer and regulator responsibilities
Adaptive Management - Integral to Approval

• Entire chapter
• Requirements for monitoring and reporting:
  – Measures
  – Impacts
  – Predictions
  – Adaptive management
Reporting to Connect the Dots

• Describe initial & adaptive actions taken to implement measures
• Demonstrate how actions fulfill intent of measures
Feedback for better EA
Using Reporting to Inform Better EA

- Systematic evaluation and reporting required for Ekati Jay Project will:
  - help the Review Board learn about practical implementation
  - May also help inform participants
  - Give insights to the uncertainty in impact predictions upon which significance determinations were based in the first place...
Systematic Adaptive Management Can Change EA

• Writing Measures
  • Build in and rely on adaptive management
  • Frame the acceptability of impacts
  • Maintain flexibility in implementation

• Information Requirements
  • Less prescriptive measures may require less detailed/advanced information
  • Robust reporting further builds confidence
Summary: Connecting the Dots

- **EA**: initial impact predictions, significance determinations, legal “measures”
- **Permitting**: refined predictions, regulatory limits and operating conditions *within significance* (e.g. response framework)
- **Operations**: implement mitigation measures, monitor, adaptively manage *within significance & regulatory framework*
Acknowledges inherent uncertainty in impact prediction & sets framework within which project can operate

– Connect EA to permitting and operations
– Feedback for better EA

Summary: Systematic Adaptive Management Framework

Thank you! Masi Cho!